

REMARKS

Claims 1-40 are currently pending in the subject application and are presently under consideration. Claims 1, 13, 18, 21, 28, 38 and 40 have been amended as shown on pp. 2-8 of the submission. Claim 7 has been cancelled as shown on pp. 3. Claim 41 is newly presented as shown on pp. 9.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 18 and 21-27 Under 35 U.S.C. §101

In the Final Office Action dated December 14, 2007, claims 18 and 21-27 were rejected as failing to fall within one of the four statutory classes of 35 U.S.C. §101. Specifically, the Examiner rejected the language “computer-readable medium” defined to include communication media, concluding this subject matter unpatentable under the Interim Guidelines. This rejection should be withdrawn for at least the following reason. Claims 18 and 21 have been amended to recite a *computer-readable storage medium* to exclude signals and carrier waves. The rejection of claims 22-27 should also be withdrawn, as these claims depend from claim 21.

II. Rejection of Claims 1-9, 11-23 and 25-40 Under 35 U.S.C. §102(e)

Claims 1-9, 11-23 and 25-40 stand rejected under 35 U.S.C. §102(e) as being anticipated by *Lin et al.* (US 2005/0091226 A1). This rejection should be withdrawn for at least the following reason. *Lin et al.* does not disclose all elements of the subject claims.

For a prior art reference to anticipate, 35 U.S.C. §102 requires that “each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999) (*quoting Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2USPQ2d 1051, 1053 (Fed. Cir. 1987)).

Applicants’ invention generally relates to a source code control architecture which allows clients to “check out” source code to facilitate offline activity and mitigate conflicts in a multi-user remote environment. A client may check out a copy of a source code file from a server, which is cached in a pristine (unmodified) condition along with associated files. A client

workspace manages the source code copy, and tracks activities and modifications using an activity list when the client is operating offline. When the user is offline, the cache facilitates uninterrupted use of the source code file(s). When a connection to a server is restored, the server files are updated according to the activity list after resolving any file version conflicts.

Lin *et al.* relates to a client side caching infrastructure employed to safeguard users and applications across connection interruptions and bandwidth changes. Specifically, Lin *et al.* discloses the use of persistent caching during times when a stable connection is present, which allows continued local utilization of the cached files if the connection is lost. The implementation enables portions of a path to a file to remain online even when the path is broken at a point. A truth-on-client scheme is employed to prevent the client from losing changes because of network reconciliation when a connection is reestablished.

Amended independent claim 1 recites, in part: *a client-side client control component of a client that tracks an activity associated with a modification of a source code file in a client workspace when the client is in an offline mode, and transmits the activity during an update process when the client moves to an online mode; and a server-side client control component that interfaces to the client-side client control component to facilitate transfer of the activity and update of the source code file in a server repository.* Lin *et al.* fails to disclose *a server-side client control component that interfaces to the client-side client control component to facilitate transfer of the activity and update of the source code file in a server repository.* Lin *et al.* is concerned with client-side caching, and does not disclose server-side architecture to implement a source-code tracking system.

Lin *et al.* also does not teach *a modification of a source code file in a client workspace in which to modify a source code file.*

Finally, Lin *et al.* does not teach the use of a component which *tracks an activity associated with a modification of a source code file when the client is in an offline mode, and transmits the activity during an update process when the client moves to an online mode.* Lin, *et al.* discloses automatically updating an older version of a file on a network during periods of intermittent connectivity, whereby one file, as saved in its current state, replaces another. However, this is not the action performed by the subject invention. By tracking *an activity associated with a modification* and transmitting *the activity during an update process*, the component of claim 1 effectively recreates the steps performed in modifying the source code file

remotely when a connection is established. This technique is markedly different from that of Lin *et al.*, which seeks to reconcile final file versions rather than track the activity by which changes a user made and later perform those same steps during an update process. Applicants' invention not only re-executes the activity performed in modifying the file during the update process, but prevents that activity from being lost upon overwrite. Later users of the file are provided with a trail of modifications as opposed to only a final product.

Independent claims 13, 21, 28, and 38 recite similar aspects as to *[tracking] an activity (or command) associated with a modification of a source code file when the client is in an offline mode, and [transmitting] the activity during an update process when the client moves to an online mode.* These claims also contain additional features not anticipated by Lin *et al.*

Amended independent claim 13 recites, in part: *a cache of a client that stores at least one of a source code file, information relating to activity associated with a modification of the source code file, filetype definitions, and site-specific help files; and an activity list of the client that stores an activity associated with a modification of the source code file in an arbitrary order which need not be sequential, such that the client transmits the activity during an update process when the client moves to an online mode.* Lin *et al.* does not disclose *a cache of a client that stores at least one of [information beyond the remote files cached client-side]*. Nor does the reference teach the use of *an activity list of the client that stores an activity associated with a modification of the source code file in an arbitrary order which need not be sequential.* In fact, Lin *et al.* does not teach any activity list whatsoever, as the cited document only reconciles end-states of cached files and does not re-create the series of activities performed in arriving at those end-states.

Amended independent claim 21 recites the steps of *performing an error check to determine if a conflict exists, if the remote source code file is locked, if an administrator has disallowed an update process; and transmitting the activity data to the remote location during an online mode to update the remote source code file during an update process if no error is determined.* Amended independent claims 28 and 38 recite similar features. Lin *et al.* does not reconcile cached files in this manner.

It is thus apparent that Lin *et al.* does not disclose these and other aspects of independent claims 1, 13, 21, 28 and 38. Therefore, the rejection of these claims should be withdrawn. The

rejection of claims 2-10, 11-12, 14-21, 22-27, 29-37 and 39-40 should also be withdrawn, as these claims depend from independent claims 1, 13, 21, 28 and 38.

III. Rejection of Claims 10 and 24 Under 35 U.S.C. §103(a)

Claims 10 and 24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lin *et al.* in view of Leherbauer (US 2003/0033590 A1). This rejection should be withdrawn for at least the following reasons. Claims 10 and 24 depend from independent claims 1 and 21, which are not obvious. Further, the cited documents, alone or in combination, fail make obvious all aspects of applicants' invention.

As discussed *supra*, applicants' invention relates to a source code control architecture which updates a remote source code file using an activity list when a connection is established. Lin *et al.* discloses a persistent client side caching technique which utilizes a truth-on-client scheme in order to protect users and applications in the event of lost connections. Lin *et al.* does not suggest several aspects of the subject claims (also shown above).

Leherbauer teaches a method and software system for incorporating a version control tool into an integrated development environment. Particularly, objects created in the integrated development environment will include command information corresponding to a version control command. This information is accessible via a version control adapter, which communicates this information to a version control tool. However, Leherbauer is silent as to the deficiencies of Lin *et al.* in suggesting the novel features of the subject application discussed above. It is thus apparent that Leherbauer cannot be combined with Lin *et al.* in a way which makes obvious the features of the independent claims 1 and 21.

In view of the foregoing, it is apparent that Lin *et al.* and Leherbauer, alone or in combination, do not anticipate these and other aspects of independent claims 1 and 21. As claims 10 and 24 respectively depend from these claims, it is requested that the rejection as to these claims be withdrawn.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP640US]

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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